

**FLOSCALDASIA (ASTERACEAE: ASTEREAE): FIRST RECORD FROM
ECUADOR AND COMMENTS ON ITS CLASSIFICATION**

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ABSTRACT

Floscaldasia hypsophila, previously known only from Colombia, is here added to the flora of Ecuador, where it is known by a single collection from Imbabura Province. Contrary to a recent alignment, the North Andean and Central American genera *Floscaldasia*, *Laestadia*, *Westoniella*, and *Flosmutisia* are hypothesized to be specialized members of the subtribe Hinterhuberinae.

KEY WORDS: *Floscaldasia*, Hinterhuberinae, Astereae, Asteraceae, Ecuador

Study of collections at US has brought to light the first known collection of *Floscaldasia hypsophila* Cuatrecasas from Ecuador.

ECUADOR. Prov. Imbabura, NE side of Cayambe Mountain, 13,500 ft, forming small mats on topmost sides of *Azorella* hummocks, 12 Dec 1961, *Cazalet & Pennington 5751* (US!, distributed to K, NY, and B).

The species constitutes a monotypic genus of the subtribe Hinterhuberinae that has previously been known only from the Cordillera Central and Cordillera Oriental of Colombia: the type was collected in Páramo del Quindío (Depto. Caldas) and other collections (US) are known from Nevado del Ruiz (Depto. Caldas) and the Sierra Nevada del Cocuy (Depto. Boyacá). Plants of *Floscaldasia hypsophila* occur in páramo at elevations of 4100-4550 meters, forming cushions on wet rocks or intermixed with other species of cushion plants. These Colombian localities are more than 600 kilometers from the one known in Ecuador.

The genus *Floscaldasia* Cuatrecasas was originally placed within the subtribe Asterinae by Cuatrecasas (1969), later suggested to be a member of the Grangeinae (Robinson & Brettell 1973), and tentatively maintained there or in the Bellidinae by Cuatrecasas (1986). In a recent circumscription of the

subtribe *Hinterhuberinae* (Nesom 1993), I excluded all of the genera placed there by Cuatrecasas (1986), except the generitype, and then repopulated the subtribe with a different set of genera apparently closely related to *Hinterhubera*. However, at the end of my review of *Astereae* classification (Nesom in prep.) and after studying a large set of specimens of the North Andean and Central American genera *Floscaldasia*, *Laestadia* Kunth ex Less., *Westoniella* Cuatrecasas, and *Flosmutisia* Cuatrecasas, I conclude that these indeed belong with *Hinterhubera*, where they are among the most highly specialized elements in the subtribe.

Floscaldasia is remarkably similar in its creeping habit and reduced leaves to *Laestadia* and both have pseudohermaphroditic central flowers; in fact, the Ecuadorian collection cited above has lain unrecognized because it was inadvertently annotated as a species of *Laestadia*. Plants of *Laestadia*, however, have punctate-glandular leaves, tubular-actinomorphic peripheral flowers, and epappose achenes. The thick, entire, linear leaves, and the 6-10-nerved achenes suggest that it belongs with the *Hinterhuberinae*, and I regard its similarities to genera of *Grangeinae* as convergent. The morphological and geographic proximity of *Laestadia* to other genera here regarded as *Hinterhuberinae* add weight to this hypothesis.

The monotypic *Flosmutisia* Cuatrecasas is similar in habit to *Oritrophium* (Kunth) Cuatrecasas, another highly reduced, North Andean genus of *Hinterhuberinae*. *Flosmutisia*, however, has flat achenes and highly modified peripheral corollas derived from central flowers, and it is almost certainly closely related to *Hinterhubera*, *Westoniella*, and the Mexican genus *Aztecaster* Nesom. *Westoniella* (Cuatrecasas 1977) is similar to *Hinterhubera* in its ericoid leaves, pseudohermaphroditic central flowers, modified peripheral flowers, and flattened achenes, and one group of its species are similar in habit as well.

Blakiella Cuatrecasas, which Cuatrecasas has included in the *Hinterhuberinae*, belongs with a group of *Astereacean* genera separate from the *Hinterhuberinae* (Nesom in prep.).

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